



# SAFETY DATA SHEET

FEDERCROM

Page: 1

Compilation date: 26/10/05

Revision No: 3

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product name:** FEDERCROM

**Product code:** A901

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Use of substance / mixture:** Liquid used to deposit chromate/oxide coatings on Aluminium and its alloys.

### 1.3. Details of the supplier of the safety data sheet

**Company name:** Confederate Chemicals Ltd

Mochdre Industrial Estate

Newtown

Powys

SY16 4LE

**Tel:** 01686 627158

**Fax:** 01686 627580

**Email:** [lab@confederatechemicals.co.uk](mailto:lab@confederatechemicals.co.uk)

### 1.4. Emergency telephone number

**Emergency tel:** 01686 627158

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CHIP:** T: R45; T: R46; T+: R26/27/28; C: R35; Sens.: R42/43; T: R48/23; N: R51/53; Xn: R62

**Classification under CLP:** STOT RE 1: H372; Acute Tox. 2: H310; Acute Tox. 3: H301+331; Aquatic Chronic 2: H411; Carc. 1A: H350; Muta. 1B: H340; Repr. 2: H361f; Resp. Sens. 1: H334; Skin Corr. 1A: H314; Skin Sens. 1: H317; STOT SE 3: H335

**Most important adverse effects:** May cause cancer. May cause heritable genetic damage. Very toxic by inhalation, in contact with skin and if swallowed. Causes severe burns. May cause sensitisation by inhalation and skin contact. Toxic: danger of serious damage to health by prolonged exposure through inhalation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of impaired fertility.

### 2.2. Label elements

**Label elements:**

**Hazard statements:** H301+331: Toxic if swallowed or if inhaled.

H310: Fatal in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

[cont...]

# SAFETY DATA SHEET

FEDERCROM

Page: 2

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

H340: May cause genetic defects.

H350: May cause cancer.

H361f: Suspected of damaging fertility.

H372: Causes damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion

GHS06: Skull and crossbones

GHS08: Health hazard

GHS09: Environmental



**Precautionary statements:** P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P262: Do not get in eyes, on skin, or on clothing.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+350: IF ON SKIN: Gently wash with plenty of soap and water.

**Label elements under CHIP:**

**Hazard symbols:** Very toxic.

Dangerous for the environment.

Corrosive.



**Risk phrases:** R45: May cause cancer.

R46: May cause heritable genetic damage.

R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.

R35: Causes severe burns.

R42/43: May cause sensitisation by inhalation and skin contact.

R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R62: Possible risk of impaired fertility.

**Safety phrases:** S23: Do not breathe fumes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek

[cont...]

# SAFETY DATA SHEET

FEDERCROM

Page: 3

medical advice.

S28: After contact with skin, wash immediately with plenty of soap and water.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S53: Avoid exposure - obtain special instructions before use.

S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

**Precautionary phrases:** Restricted to professional users.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

##### SODIUM BIFLUORIDE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
215-608-3	1333-83-1	T: R25; C: R34	Acute Tox. 3: H301; Skin Corr. 1B: H314	10-30%

##### CHROMIUM TRIOXIDE

215-607-8	1333-82-0	T: R45; T: R46; O: R9; T: R24/25; T+: R26; C: R35; Sens.: R42/43; T: R48/23; Xn: R62; N: R50/53	Ox. Sol. 1: H271; Carc. 1A: H350; Muta. 1B: H340; Repr. 2: H361f; Acute Tox. 2: H330; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT RE 1: H372; Skin Corr. 1A: H314; Resp. Sens. 1: H334; Skin Sens. 1: H317; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	10-30%
-----------	-----------	---	---	--------

##### HYDROFLUORIC ACID...60%

231-634-8	7664-39-3	T+: R26/27/28; C: R35	Acute Tox. 2: H330; Acute Tox. 1: H310; Acute Tox. 2: H300; Skin Corr. 1A: H314	1-10%
-----------	-----------	-----------------------	---	-------

##### SODIUM MOLYBDATE DIHYDRATE

231-551-7	10102-40-6	Xi: R36/37/38	-	1-10%
-----------	------------	---------------	---	-------

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

[cont...]

# SAFETY DATA SHEET

FEDERCROM

Page: 4

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Give 1 cup of water to drink every 10 minutes. Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. Transfer to hospital as soon as possible.

## 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** Irritation or pain may occur at the site of contact. Severe burns may occur. Absorption through the skin may occur causing symptoms similar to those of ingestion.

**Eye contact:** There may be irritation and redness. There may be severe pain. Corneal burns may occur.

**Ingestion:** There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting. The breathing may become shallow and rapid. May cause dizziness.

**Inhalation:** There may be a feeling of tightness in the chest with shortness of breath.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

## 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. Eye bathing equipment should be available on the premises.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Carbon dioxide. Alcohol resistant foam. Dry chemical powder. Do not use sawdust or anything which may be oxidised.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** Toxic. Corrosive. In combustion emits toxic fumes of hydrogen fluoride.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

[cont...]

# SAFETY DATA SHEET

FEDERCROM

Page: 5

## 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Do not use sawdust or any materials which may be oxidised. Dispose of as Special Waste. Do not allow to enter surface water courses.

## 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. Avoid incompatible materials and conditions - see section 10 of SDS.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

HYDROFLUORIC ACID...60%

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
EU	1.8 ppm	3 ppm	-	-

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient local exhaust ventilation.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

**Eye protection:** Safety goggles. Ensure eye bath is to hand.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck. Boots made of PVC. Ensure safety shower is to hand.

## Section 9: Physical and chemical properties

[cont...]

# SAFETY DATA SHEET

FEDERCROM

Page: 6

## 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Dark Amber

**Odour:** Characteristic odour

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Miscible in all proportions

**Relative density:** 1.330 - 1.345

## 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes of hydrogen fluoride.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Hazardous ingredients:**

#### CHROMIUM TRIOXIDE

IVN	RAT	LD50	9260	µg/kg
ORL	MUS	LD50	127	mg/kg
ORL	RAT	LD50	80	mg/kg

[cont...]

# SAFETY DATA SHEET

FEDERCROM

Page: 7

## HYDROFLUORIC ACID...60%

IPR	RAT	LDLO	25	mg/kg
SCU	FRG	LDLO	112	mg/kg

### Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (very toxic)	INH DRM ING	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated
Sensitisation	INH DRM	Hazardous: calculated
Repeated dose toxicity	INH	Hazardous: calculated
Carcinogenicity	--	Hazardous: calculated
Mutagenicity	--	Hazardous: calculated
Toxicity for reproduction	--	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** Irritation or pain may occur at the site of contact. Severe burns may occur. Absorption through the skin may occur causing symptoms similar to those of ingestion.

**Eye contact:** There may be irritation and redness. There may be severe pain. Corneal burns may occur.

**Ingestion:** There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting. The breathing may become shallow and rapid. May cause dizziness.

**Inhalation:** There may be a feeling of tightness in the chest with shortness of breath.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

### Section 12: Ecological information

#### 12.1. Toxicity

**Ecotoxicity values:** No data available.

#### 12.2. Persistence and degradability

#### 12.3. Bioaccumulative potential

#### 12.4. Mobility in soil

**Mobility:** Soluble in water.

#### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

#### 12.6. Other adverse effects

**Other adverse effects:** Toxic to aquatic organisms.

### Section 13: Disposal considerations

[cont...]

# SAFETY DATA SHEET

FEDERCROM

Page: 8

## 13.1. Waste treatment methods

**Disposal operations:** Do not discharge concentrated material into a sewer. Waste is classed as special waste by the Hazardous Waste Regulations 2005 and must be disposed of by a licensed waste disposal contractor.

**Recovery operations:** Dispose of in accordance with local and national regulations.

**Disposal of packaging:** All residues must be removed from packaging prior to disposal as controlled waste. Arrange for collection by specialised disposal company. Clean with water. Treat the cleaning water following the above method for waste product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN2922

### 14.2. UN proper shipping name

**Shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S.  
(CHROMIUM TRIOXIDE; HYDROFLUORIC ACID 60%)

### 14.3. Transport hazard class(es)

**Transport class:** 8 (6.1)

### 14.4. Packing group

**Packing group:** II

### 14.5. Environmental hazards

**Environmentally hazardous:** Yes

**Marine pollutant:** No

### 14.6. Special precautions for user

**Special precautions:** No special precautions.

**Tunnel code:** E

**Transport category:** 3

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

[cont...]



# SAFETY DATA SHEET

FEDERCROM

Page: 9

## Other information

**Other information:** Refer to the Manual Handling Operations Regulations 1992.

Store in accordance with HSE Guidance Note CS17.

Classed as special waste by the Hazardous Waste Regulations 2005.

Read in conjunction with the Technical Data sheet concerning use of the product.

NOTE: alterations and additions have been made in Sections 2, 3, 8, 11, and 15 in revision 3.

**Phrases used in s.2 and s.3:** H271: May cause fire or explosion; strong oxidiser.

H300: Fatal if swallowed.

H301: Toxic if swallowed.

H301+331: Toxic if swallowed or if inhaled.

H310: Fatal in contact with skin.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H330: Fatal if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

H340: May cause genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H361f: Suspected of damaging fertility.

H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

R9: Explosive when mixed with combustible material.

R24/25: Toxic in contact with skin and if swallowed.

R25: Toxic if swallowed.

R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.

R26: Very toxic by inhalation.

R34: Causes burns.

R35: Causes severe burns.

R36/37/38: Irritating to eyes, respiratory system and skin.

R42/43: May cause sensitisation by inhalation and skin contact.

R45: May cause cancer.

R46: May cause heritable genetic damage.

[cont...]

## SAFETY DATA SHEET

FEDERCROM

Page: 10

R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R62: Possible risk of impaired fertility.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.